

25. The process according to claim 24, wherein the halogenated hydrocarbon is an aliphatic alkane corresponding to the general formula $C_wH_xX_yF_z$ (I), wherein
w is an integer between 1 and 6,
x is an integer between 0 and $(2w + 1)$,
y is an integer between 1 and $(2w + 1)$,
z is an integer between 0 and $(2w + 1)$,
the sum $(x + y + z)$ has the value $(2w + 2)$ and
X represents chlorine or bromine.
27. The process according to claim 24, wherein the halogenated hydrocarbon is an aliphatic alkene corresponding to the general formula $C_wH_xX_yF_z$ (I), wherein
w is an integer between 1 and 6,
x is an integer between 0 and $(2w - 1)$,
y is an integer between 1 and $(2w - 1)$,
z is an integer between 0 and $(2w - 1)$,
the sum $(x + y + z)$ has the value $2w$ and
X represents chlorine or bromine.
28. The process according to claim 24, wherein the reaction of the halogenated hydrocarbon with the hydrogen fluoride takes place in a gas phase.
29. The process according to claim 24, wherein difluoromethane is produced by reacting hydrogen fluoride and dichloromethane.
30. The process according to claim 24, wherein 1,1,1,2-tetrafluoroethane is produced by reacting hydrogen fluoride and a compound chosen from trichloroethylene or 2-chloro-1,1,1-trifluoroethane.

31